



THE PORT AUTHORITY
OF NEW YORK AND NEW JERSEY

CONFORMED DRAWING
08/15/86
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No. Date Revision Approved
Engineering Department
Design Division

The
World
Trade
Center

STANDBY POWER
5 WORLD TRADE CENTER

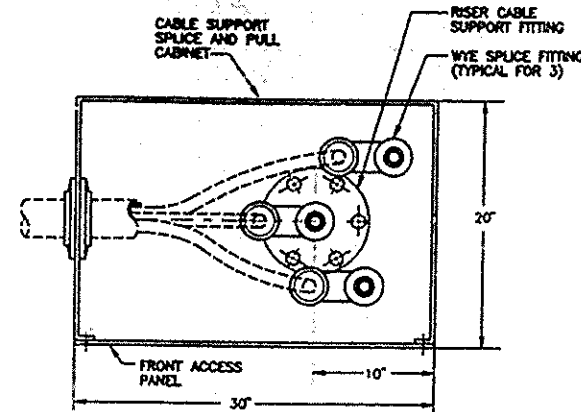
ELECTRICAL
2 WTC 15.0KV CABLE
SPICE AND SUPPORT
BOX DETAILS

This drawing is subject to conditions in contract
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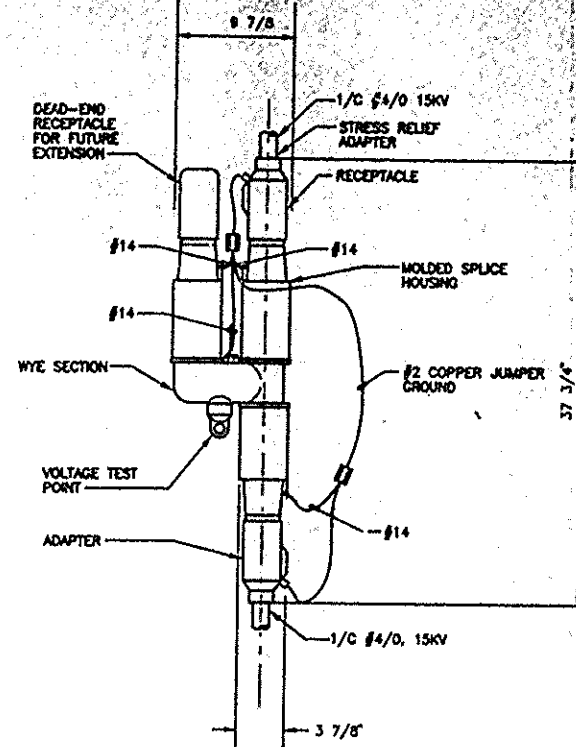
Prepared by: M.A.R. Drawn by: M.A.R. Checked by:
Date: 11/17/90 Scale: NONE
Contract Number: WTC-945.071 Drawing Number: E5-02

NOTES:

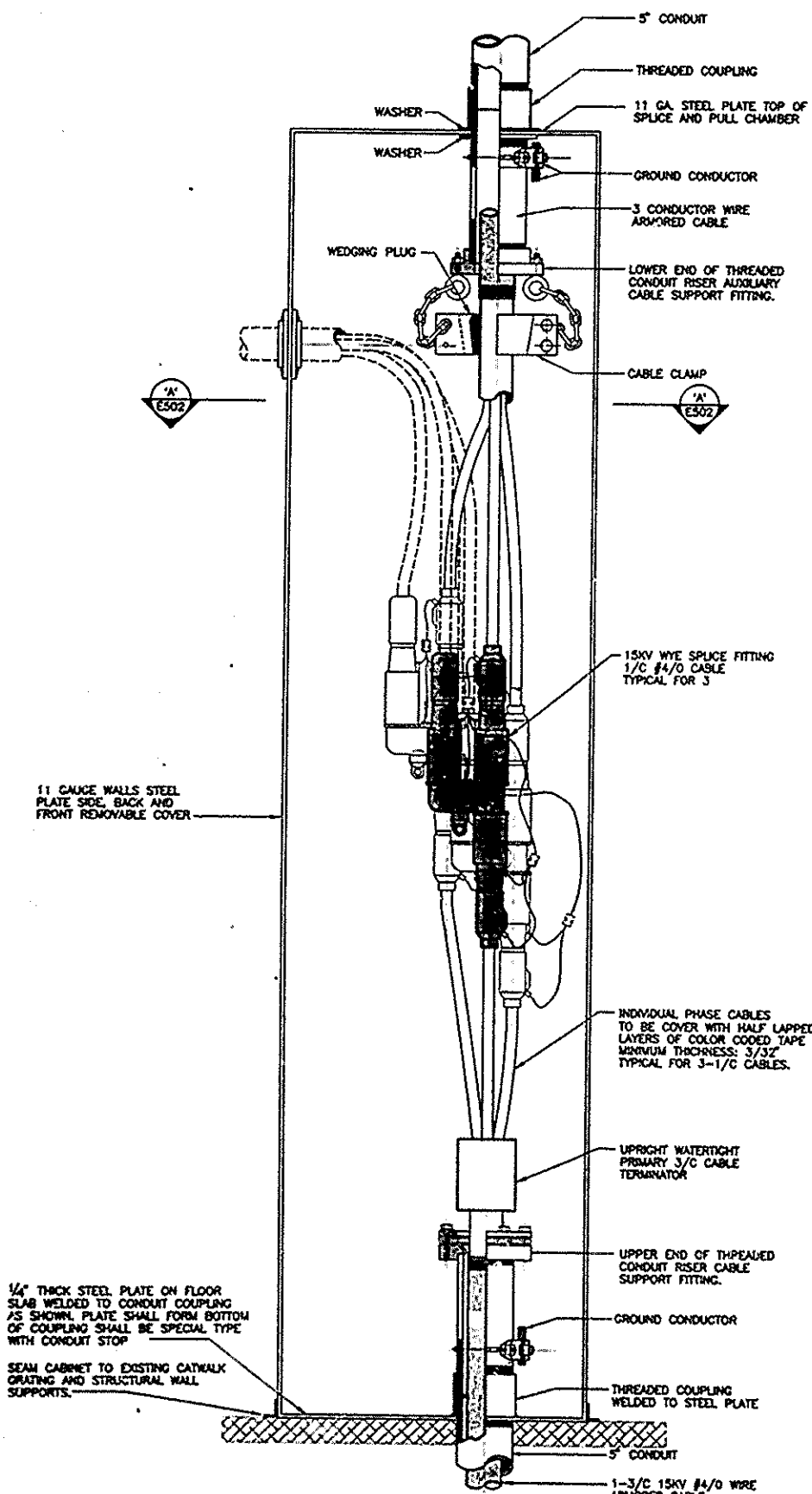
1. WYE SPICE FITTINGS SHALL BE ELSTHOLD 15KV FOR USE ON 1/C #4/0 CABLE PER THAL. PHASE 15KV 95KV BL. SYSTEM.
2. THE SPICE SHALL BE CAPABLE TO WITHSTAND 15KV, 60HZ, ONE (1) MINUTE, 55KV DC, 15 MINUTES; CORONA 11KV EXTENSION.
3. CURRENT RATINGS SHALL BE 600 AMPS RMS CONTINUOUS, 1000 AMPS, RMS 8 HOUR OVERLOAD, WITHSTAND MOMENTARY CURRENT RATINGS OF 27000 AMPS RMS, SYM, 4 SECONDS, 40,000 AMPS, RMS, ASYM, 12 CYCLES.
4. WYE SPICE CABLES INSTALLATION: AFTER PROPER CABLE PREPARATION, ADAPTERS AND HOUSING ARE POSITIONED ON THE CONDUCTOR ENDS, SPICE TERMINALS SHALL BE CRIMPED TO THE CONDUCTOR AND THE CONDUCTOR BOLTED TO WYE SECTIONS. JOIN THE HOUSING SECTIONS TOGETHER TO COMPLETE THE SPICE. THE ASSEMBLY TOOL (ELASTHOLD 15KV) OBTAINED WITH THE WYE SPICE SHALL BE USED WHEN INSTALLING THE SPICE.
5. HALF LAPPED LAYER OF ARC FIREPROOFING TAPE TO BE APPLIED TO THE ENTIRE SECTION OF EXPOSED CABLES IN EACH PULL AND SPICE CABINETS AND BOXES AFTER CABLE INSTALLATION IS COMPLETED.
6. WYE SPICE ASSEMBLY SHALL BE PERFORMED AFTER THE UPPER SECTION OF THE CABLE INSTALLATION IS IN PLACE AND CABLE SUPPORTS PERMANENTLY AT THE NEXT UPSTREAM CABINET.
7. 15KV FEEDER RISER WIRE ARMORED CABLE INSTALLATION PROCEDURE AT CABLE SUPPORTS AND SPICE CABINETS SHALL BE AS FOLLOWS:
a) PULL ARMORED CABLE UP INTO CABINET FROM LOWER CABINET LOCATION AND APPLY TEMPORARY CABLE SUPPORTS.
b) STRIP WIRE ARMOR, WRAP AROUND THE CABLE SUPPORT FITTING ASSEMBLY AND POSITION CABLE SUPPORT FITTING OVER CONDUIT.
c) ASSEMBLE AND POSITION LOWER AUXILIARY CABLE SUPPORT FITTING AT END OF UPPER CABLE INSTALLATION.
d) INSTALL 3/4" WATER TIGHT CABLE TERMINATIONS AT UPPER CABLES AND LOWER CABLE ENTRANCE.
e) INSTALL CABLE SPICE FITTINGS.
f) APPLY ARC PROOFING AT EXPOSED CABLE IN CABINET.
g) WHERE INDICATED ON DRAWINGS PROVIDE INSTALLATION OF WYE SPICE TO SUBSTATIONS BY REMOVING DEAD-END RECEPTACLE COVER AND ATTACH 1/C CABLE TO SPICE FITTING WYE PORT.
8. SPICE AND PULL CABINET SHALL BE ATTACHED AND SECURED TO THE EXISTING CATWALK AND STRUCTURAL SUPPORT. SEE STRUCTURAL DRAWINGS FOR ATTACHMENT DETAILS.
9. 15KV 3/C WIRE ARMORED RISER CABLE AND 1/C NON-ARMORED CABLE FOR INSTALLATION IN CONDUIT ARE AUTHORITY FURNISHED EQUIPMENT.
10. 15KV 3/C WIRE ARMORED RISER CABLE AND 1/C NON-ARMORED PARALLEL-LAY CABLE ARE AUTHORITY FURNISHED EQUIPMENT.
11. FOR RISER CONDUIT STRUCTURAL SUPPORT APPLICATION DETAILS SEE DWG. E5-03.
12. FOR 15KV CONDUIT ROUTING AND SPICE AND CABLE SUPPORT CABINET LOCATIONS SEE DISTRIBUTION SYSTEM RISER DIAGRAM DWG. E1-02.



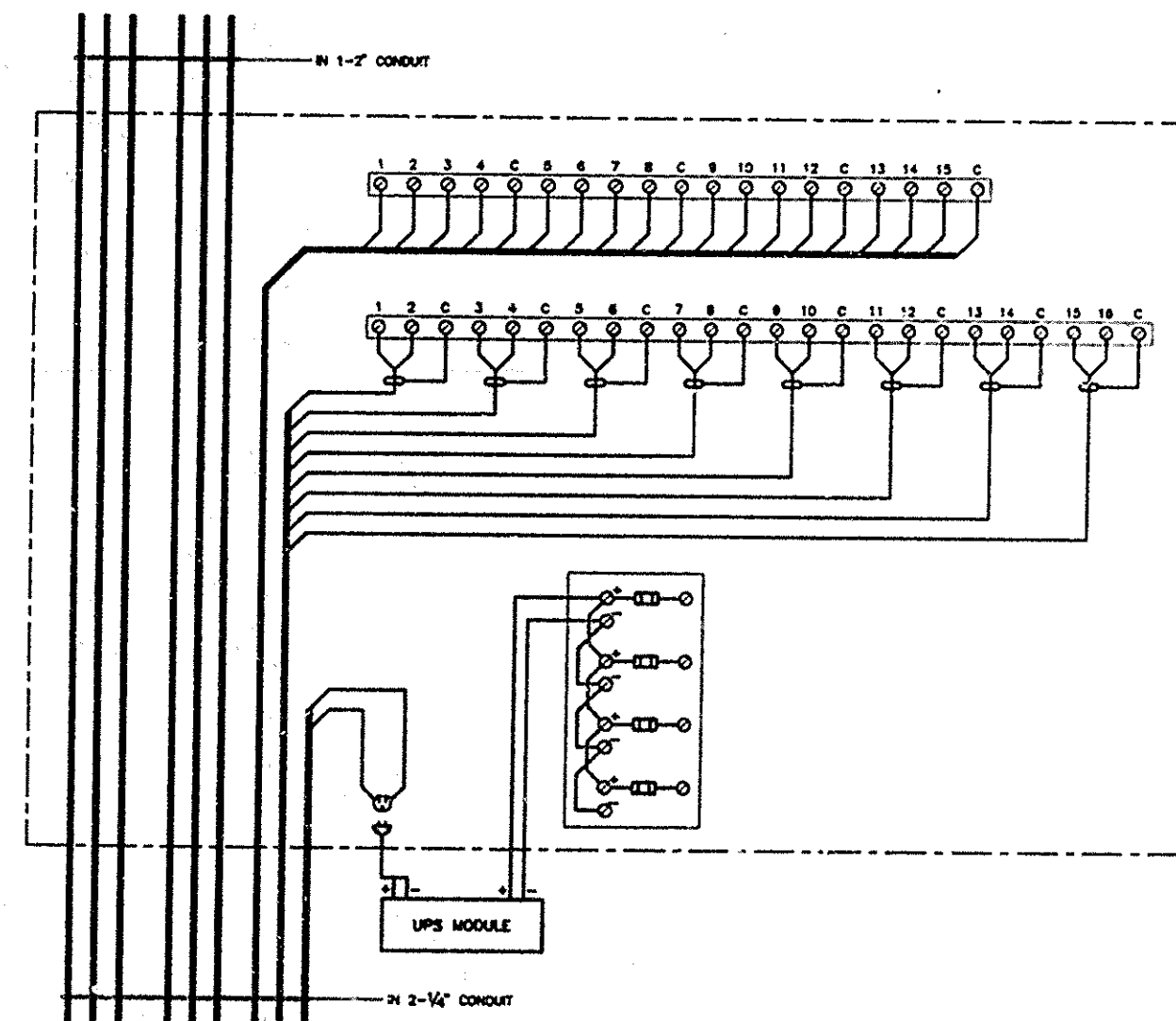
SECTION "A-A"
NO SCALE



15KV-WYE SPICE
(TYPICAL)
NO SCALE



TYPICAL INSTALLATION DETAIL OF
15KV ARMORED CABLE SUPPORT
SPICE AND PULL CABINET
NO SCALE



TYPICAL CONTROL TERMINAL
STRIP CABINET
NOT TO SCALE

NOTES:

1. FOR NUMBER AND SIZE FOR CONDUIT AND CABLE REQUIREMENTS SEE RISER DIAGRAM DRAWING E1-02.
2. UPS MODULE SHALL BE LEONIT MODEL NUMBER CAT 700M7-120 120VAC, OUTPUT 120VAC.
3. UPS INSTALLATION SHALL INCLUDE EQUIPMENT RACK MOUNT ENCLOSURE WITH SLIDE RAILS OR BRACKETS ATTACHED AND SUPPORTED BY SUITABLE WALL MOUNTED SHELF. MOUNT UPS PENDENT OR ABOVE THE TERMINAL STRIP CABINET AND CONNECTED TO GROUNDING TYPE RECEPTACLE PROVIDED IN THE STRIP CABINET.

